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Evaluation of Pesticide Petition No. 9F0743  
for tetrachloroisophthalonitrile (Daconil) and its  
metabolite 4-hydroxy-2,5,6-trichloroisophthalonitrile  
Submitted by Diamond Shamrock Corporation  
Filed July 30, 1968

INTRODUCTION

The company has changed their name Diamond Alkali Co. to Diamond Shamrock Corporation.

Refer to PP No. 7F0599 and FDA's opinion dated October 30, 1967 of that petition.

Diamond Shamrock is proposing tolerances for Daconil and its metabolite 0.1 ppm in or on potatoes.

4-hydroxy-2,5,6-tetrachloroisophthalonitrile has now been found to be a metabolite.

The name of the product is Daconil 2787 W-75.

Daconil is a fungicide.

DIRECTIONS FOR USE

Potato - early and late blight and Botrytis vine rot. Apply 1-1.5 lbs./A (0.75-1.125 lbs.A/A) in sufficient H<sub>2</sub>O for adequate coverage. Begin when plants are 6 inches high or when disease threatens and continue at 7-10 intervals.

Do not graze on treated areas or feed plant refuse to livestock.

ANALYTICAL METHOD

Modified GC procedure to detect the hydroxy metabolite (DAC-3701).

Limit of detection for Daconil and DAC-3701 is 0.01 to 0.05 ppm.

DISCUSSION OF DATA

Some of the data submitted for DA-3701 are listed for potatoes.

Dosage lbs.A/A	No. of Applic.	No. of Samples	PHI	DAC 3701 ppm
1.125	7	11	4	0.05
1.125	11	3	28	0.05

Soil data was submitted on laboratory conditions for DAC-3701.

Type soil	Estimated 1/2 life
Portageville sandy loam	40 <i>ppm</i> <i>Treatment</i> 36
Clarkton sand	40 53
Lismore silty clay loam	100 67
Lalke county loam	40 141
Clay	40 220

Feeding studies for DAC-3701 were submitted on dogs.

PPm feed	Sex	Kidney	Liver	Muscle	Urine
15,000	M	1.4	1.5	-	
30,000	M	0.9	2.6	ND	0.19
15,000	F	0.9	-	-	
30,000	F	-	-	ND	0.24

Most of the residues are excreted in the feces. No residue of the parent compound were found.

#### CONCLUSION

No raw data or recovery studies were submitted for DAC-3701

#### RECOMMENDATION

A favorable opinion is given.

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8/8/68

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To: William Stokes  
Petitions Control Branch  
Bureau of Science  
Food and Drug Administration

From: Harry W. Hays, Director

Subject: Pesticide Petition Number 9F0743 requesting a tolerance for tetrachloroisophthalonitrile (Daconil) and its metabolite 4-hydroxy-2,5,6-trichloroisophthalonitrile submitted by Diamond Shamrock Corporation, and filed July 30, 1968.

We have examined the residue data, analytical methods, and other information in this petition for a tolerance for tetrachloroisophthalonitrile (Daconil) and its metabolite 4-hydroxy-2,5,6-trichloroisophthalonitrile of 0.1 part per million (ppm) in or on potatoes. As required by Public Law 518, 83rd Congress, we herein offer an opinion as to whether the proposed tolerance reasonably reflects the amount of residue likely to result when this pesticide chemical is used as proposed.

It is the opinion of this Department that the proposed tolerance reasonably reflects the amount of residue likely to result when the pesticide chemical is used as proposed.